

FORM PTO-1390 (REV 12-2001)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEYS DOCKET NUMBER 701586-054982US
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371			U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/589709
INTERNATIONAL APPLICATION NO. PCT/US2005/005255	INTERNATIONAL FILING DATE 18 February 2005 (18.02.2005)	PRIORITY DATE CLAIMED 18 February 2004 (18.02.2004)	
TITLE OF INVENTION METHOD FOR DETECTING AND QUANTIFYING RARE MUTATIONS/POLYMORPHISMS			
APPLICANT(S) FOR DO/EO/US CANTOR, et al.			
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. <input type="checkbox"/> This is an express request to promptly begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. <input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31). <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ol style="list-style-type: none"> <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). <input type="checkbox"/> has been communicated by the International Bureau. <input checked="" type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> <input type="checkbox"/> is attached hereto. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)). <ol style="list-style-type: none"> <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). <input type="checkbox"/> have been communicated by the International Bureau. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. <input checked="" type="checkbox"/> have not been made and will not be made. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). <p>Items 11 to 20 below concern document(s) or information included:</p> <ol style="list-style-type: none"> <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. <input type="checkbox"/> A substitute specification. <input type="checkbox"/> A change of power of attorney and/or address letter. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4). <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). <input type="checkbox"/> Other items or information: Express Mail Certificate EV653003950US, Statement of Limited Recognition, Copy of International Search Report. Form PTO 1449-SB08, Copies of Cited References and Return Postcard 			


INTERNATIONAL APPLICATION NO. PCT/US2005/00255 10/589709		INTERNATIONAL FILING DATE 18 February 2005 (18.02.2005)		PRIORITY DATE CLAIMED 18 February 2004 (18.02.2004)	
The following fees are submitted:				CALCULATIONS	PTO USE ONLY
21. <input checked="" type="checkbox"/> Basic national fee (37 CFR 1.492(a)).....				\$300.00	
22. <input checked="" type="checkbox"/> Examination fee.....				\$200.00	
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....				\$0	
All other situations.....				\$200.00	
23. <input checked="" type="checkbox"/> Search fee.....				\$500.00	
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....				\$0	
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....				\$100.00	
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.....				\$400.00	
All other situations.....				\$500.00	
TOTAL OF 21, 22 and 23 =				\$	\$1000
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE		
- 100 =	/50 =		x \$250.00	\$	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	12- 20 =	0	x \$50.00	\$	
Independent claims	3- 3 =	0	x \$200.00	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$500	
SUBTOTAL =				\$500	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
TOTAL NATIONAL FEE =				\$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	
TOTAL FEES ENCLOSED =				\$500	
				Amount to be refunded:	\$
				Amount to be charged:	\$

- a. ☐ A check in the amount of \$_____ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 19-2380 in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 19-2380. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

NIXON PEABODY LLP
100 Summer Street
Boston, Massachusetts 02110-2131


SIGNATURE

Ronald I. Eisenstein/Leena H. Karttunen

NAME

30,628/L0207

REGISTRATION NUMBER

Practitioner's Docket No. 701586-054982US

IN THE UNITED STATES RECEIVING OFFICE

International Application Number	International Filing Date	International Earliest Priority Date
PCT/US2005/005255	18 February 2005 (18.02.2005)	18 February 2004 (18.02.2004)

TITLE OF INVENTION: METHOD FOR DETECTING AND QUANTIFYING RARE MUTATIONS/POLYMORPHISMS

APPLICANT FOR DO/US/RO: CANTOR, et al.

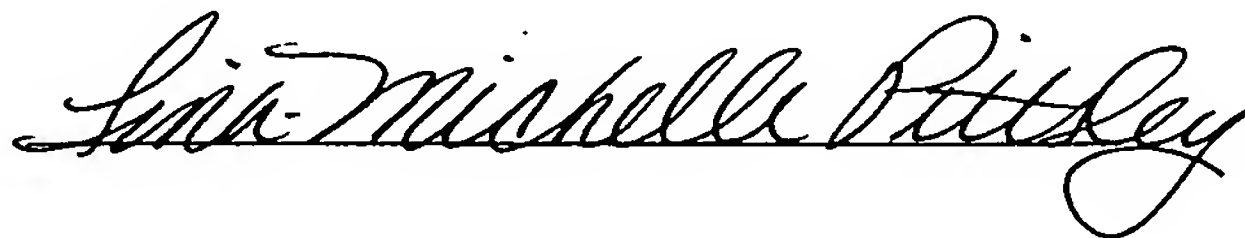
VERIFIED CERTIFICATION OF EXPRESS MAILING DATE
(INTERNATIONAL APPLICATION (37 C.F.R. section 1.10(c)))

I declare that, on 17 August, 2006 I deposited, with the United States Postal Service, in an envelope "Express Mail, Post Office to Addressee," bearing Label Number EV653003950US, addressed to the "MAIL STOP PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450," and having an express mail certification that I executed, the following papers:

1. Express Mail Certificate EV653003950US (1 pg.);
2. Statement of Limited Recognition (1 pg.);
3. Transmittal Letter Under 35 U.S.C. 371 - page 3 in duplicate (4 pp.);
4. Application Data Sheet (6 pp.);
5. Copy of International Search Report - Form PCT/ISA/210 (4 pp.);
6. Information Disclosure Statement, including Form 1449-SB08b (4 pp.);
7. Copy of Cited References A1-A2, B1 and C1-C2;
8. Preliminary Amendment (7 pp.); and
9. Return Receipt Postcard.

A copy of these papers from the file of this application is attached.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application of any patent issuing thereon.



Date: August 17, 2006

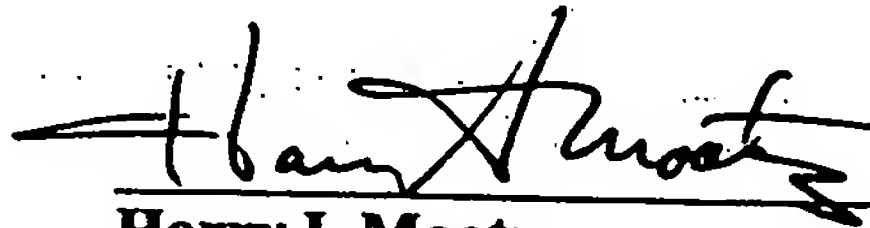
Tina-Michelle Pittsley
(type or print name of person certifying)

LIMITED RECOGNITION UNDER 37 CFR § 11.9(b)

Leena H. Karttunen is hereby given limited recognition under 37 CFR §11.9(b) as an employee of Nixon Peabody LLP, to prepare and prosecute patent applications wherein the patent applicant is the client of Nixon Peabody LLP and an attorney or agent of record in the applications is a registered practitioner who is a member of Nixon Peabody LLP. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Leena H. Karttunen ceases to lawfully reside in the United States, (ii) Leena H. Karttunen's employment with Nixon Peabody LLP ceases or is terminated, or (iii) Leena H. Karttunen ceases to remain or reside in the United States on an H-1B visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Limited Recognition No. L0207
Expires: February 11, 2007



Harry I. Moatz
Director of Enrollment and Discipline